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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/876,985

06/08/2001

Dinesh Nair

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9952

35690

7590

07/02/2004

MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C.
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EXAMINER

DESIRE, GREGORY M

ART UNIT

PAPER NUMBER

2625

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/876,985

Applicant(s)

NAIR ET AL.

Examiner

Gregory M. Desire

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 14-25 and 28-38 is/are rejected.
- 7) ☒ Claim(s) 12, 13, 26, 27, 39 and 40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claims 29-37 are objected to because of the following informalities: The claims depend on claims 29. It appears that it should depend on claim 28. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 6-7, 10-11, 15-18, 20-21, 24-25, 28-31, 33-34 and 37-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Geiser et al (5,797,396).

Regarding method claim 1, system claim 15 and memory medium claim 28 Geiser discloses,

Determining one or more characteristics of region of interest within the region, wherein said region of interest includes point of interest (note col. 9 lines 20-23 determining radius within the region includes points x, y)

Determining a continuous trajectory based on the one or more characteristics of the region of interest, wherein the continuous trajectory allows measurement of the

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region of interest (note col. 9 lines 24-26 a semicircular arc is determined based on radii of the region of interest).

Measuring the region of interest at a plurality of points along the continuous trajectory to generate a sample data set (note col. 9 lines 30-35 posterior is measured along the semicircular arc);

Performing a surface fit of the sample data set using the approximate model to generate a parameterized surface (note col. 9 lines 37-49, posterior is fit with circular arc filter generating a parameterized surface); and

Calculating a location of the point of interest based on the parameterized surface (note col. 9 lines 64-67, calculates center point).

Regarding method claim 2, system claim 16 and memory medium claim 29 Geiser discloses,

Wherein the one or more characteristics of the region of interest comprise a radius of the region of interest (note col. 9 lines 24-26, cites region of interest comprise a radius).

Regarding method claim 3, system claim 17 and memory medium claim 30 Geiser discloses,

Wherein the one or more characteristics of the region of interest comprise an approximate location of the point of interest, wherein said approximate location of the

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point of interest comprises a center of the region of interest (note col. 9 line 34 and 67, point of interest as center point).

Regarding method claim 4, system claim 18 and memory medium claim 31 Geiser discloses,

Measuring the region of interest at the point of interest to confirm correctness of the calculated location (note col. 9 lines 30-34, measures the region of interest determining calculating location).

Regarding method claim 6, system claim 20 and memory medium claim 33 Geiser discloses,

Wherein the region of interest comprise a data distribution (note fig. 10a, fig shows data distribution of region of interest).

Regarding method claim 7, system claim 21 and memory medium claim 34 Geiser discloses,

Wherein the data distribution comprises a Gaussian distribution and wherein the point of interest comprises a Gaussian peak (note fig. 18b-18d, shows peak distribution of point of interest)

Regarding method claim 10, system claim 24 and memory medium claim 37 Geiser discloses,

Locating the region of interest in the region (note col. 9 lines 20-21, region of interest is computed thus located).

Regarding method claim 11, system claim 25 and memory medium claim 38 Geiser discloses,

Scanning the region to locate two or more points of the region of interest, wherein each of two or more point is associated with measured data (col. 9 lines 21-24, region of interest is scanned computing from the located two or more points length measuring data);

Determining a local point of interest in the region of interest proximate to two or more point of the region of interest (note fig. 2, shows center point x1, y1 located near plurality of points of the radius).

Regarding method claim 14 Geiser discloses,

Generating output indicating the calculated location of the point of interest (note col.. 7 line 6- col. 8 line 6, system implemented by a computer, digitized and stored).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5, 8-9, 19, 22-23, 32 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geiser et al in further view of Enszt et al (6,100,893).

Regarding method claim 5, system claim 19 and memory medium claim 32 Geiser,

Determines a continuous trajectory. However, Geiser does not determine a scan trajectory base on smoothly connected overlapping circles. Enszt approximates skeleton based on connected overlapping circles and col. 7 lines 24-29 and 25-30. Therefore it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement scanning by using connected overlapping circles in the system of Geiser. Improved accuracy would have been a highly desirable feature in image acquisition field to capturing function and Enszt recognized improved accuracy would be expected when determining a scan trajectory based on connected overlapping circles.

Regarding method claim 8, system claim 22 and memory medium claim 35 Geiser and Enszt discloses,

Wherein the region has a dimensionality of one of one, two and three (note Enszt col. 3 lines 20-25).

Regarding method claim 9, system claim 23 and memory medium claim 36, Geiser and Enszt discloses,

Where the region has a dimensionality greater than three (note Enszt col. 3 line 22-24)

Allowable Subject Matter

6. Claims 12-13, 26-27 and 39-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding method claim 12, system claim 26 and memory medium claim 39

Prior art fails to disclose calculating a second scan line, wherein the second scan line passes through local point of interest and wherein the second scan line is orthogonal to the first scan line and measuring the region along the second scan line to generate second scan line associated measure data. These features in combination with other limitations are not taught in the prior art. Claim 13, 27 and 40 depend on claim 12, 26 and 39, respectively. Therefore are also objected.

Conclusion

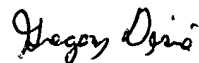
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory M. Desire whose telephone number is (703) 308-9586. The examiner can normally be reached on M-F (8:30-6:00) Second Monday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on (703) 308-5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gregory M. Desire
Examiner
Art Unit 2625



G.D.
June 27, 2004